

1. Piston ring containing at least one operating surface (2) as well as an upper face and a lower face (3, 4), where the operating surface (2) includes a layering (11) applied in accordance with the so-called High-Velocity-Oxy-Fuel (HVOF) procedures, and having a surface roughness factor $R_k < 0.12 \mu\text{m}$.
2. Piston ring according to Claim 1, thereby characterized that the layering (11) has a surface roughness factor of $R_k < 0.10 \mu\text{m}$, and especially with $R_k < 0.08 \mu\text{m}$.
3. Piston ring according to Claims 1 through 2, thereby characterized that the layering (11) is formed on the basis of carbide materials.
4. Piston ring according to Claims 1 or 3, thereby characterized that the layering (11) is formed on the basis of WC and/or TiC, and/or CrC.
5. Piston ring according to Claim 1 through 4, thereby characterized that the layering (11) has a porosity of $< 5\%$.
6. Piston ring according to Claim 1 through 5, thereby characterized that at least one face area (3, 4) is at least partially trapezoidal in form..
7. Piston ring according to Claim 1 through 6, thereby characterized that at least the trapezoidal formed face area (7, 8, 9, 10) is provided with a galvanic protective layer (12, 13).
8. Piston ring according to Claim 1 through 7, thereby characterized that the galvanic protective layer (12, 13) formed is on the basis of chrome.

9. Piston ring according to Claim 1 through 8, thereby characterized that the thickness of the chrome layer (12, 13) lies between 1 μm and 20 μm .
10. Procedures for the manufacture of a piston ring in accordance with Claims 1 through 9, thereby characterized that multiple piston rings may be gathered in a packet, and the operating surfaces (2) of the piston ring blanks may be provided with a thermal spray layering (11) according to the HVOF-procedures, the piston rings (1) individually and in the area of at least one of the faces (3, 4) may be subjected to trapezoidal processing as needed as well as subsequently at least the trapezoidal formed face areas (7, 8, 9, 10) may be provided with a galvanic isolated protective layer (12, 13).
11. Procedures in accordance with Claim 10, thereby characterized that when applying the layering (11) a porosity $< 5\%$ and an upper surface roughness measured in an axial direction of $R_k < 0.10 \mu$ in the layering may be adjusted.
12. Procedures in accordance with Claim 10 or 11, thereby characterized that the respective trapezoidal formed face areas (7, 8, 9, 10) have a consistent chrome layer (11, 12) with a layer thickness between 1 and 20 μm .